



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,854	02/18/2004	Toshihide Ezoe	Q79759	9456
23373	7590	11/13/2008		
SUGHTRUE MION, PLLC			EXAMINER	
2100 PENNSYLVANIA AVENUE, N.W.			RAMDHANE, BOBBY	
SUITE 800				
WASHINGTON, DC 20037			ART UNIT	PAPER NUMBER
			1797	
			MAIL DATE	DELIVERY MODE
			11/13/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/779,854	<b>Applicant(s)</b> EZO ET AL.
	<b>Examiner</b> BOBBY RAMDHANIE	<b>Art Unit</b> 1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 09 September 2008.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 6,8,10,11 and 41 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 6,8,10,11 and 41 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 09/03/2008

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

### **DETAILED ACTION**

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/09/2008 has been entered.

#### ***Response to Arguments***

2. Applicant's arguments with respect to claims 6, 8, 10, 11, & 41 have been considered but are moot in view of the new ground(s) of rejection. The new grounds of rejections are necessitated by applicants' amendment to the claims and the addition of Claim 41.

#### ***Response to Amendment***

#### ***Specification***

3. The disclosure is objected to because of the following informalities: The Specification does not disclose what a "high polymer" actually is.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 recites a film that is broader in scope than in Claim 6. In Claim 6, the film is limited to consist of only one material not a mixture of the materials nor is the film in Claim 6 a mixture of components of the same material.

6. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 recites a "high polymer." It is unclear what a high polymer is defined to be.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 6, 8, 10, 11, & 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Kooyman et al (1991).

9. Applicants' claims are toward a device.

10. Regarding Claims 6, 8, 10, 11, & 14, Kooyman et al discloses the biosensor comprising A). A substrate (See Page 83, Experimental Section; Silver Layer); B). Coated with a film selected from the group consisting of polystyrene, polyethylene, polypropylene, polyethylene terephthalate, polyvinyl chloride, polymethyl methacrylate, polyester and nylon, and whose swelling degree in pure water at 25°C is between 1 and

5 with respect to the film thickness in a dry state (this is an inherent property of the single component films), the film being on a surface of the substrate to be contacted with a physiologically active substance (See Page 83, Experimental Section, polystyrene overlayer).

11. Additional Disclosures Included: Claim 8: Wherein the film whose swelling degree in pure water at 25°C is between 1 and 5 with respect to the film thickness in a dry state comprises a high polymer comprising 50% by weight or more of monomers having a solubility in water of 20% by weight or less (See Page 83, polystyrene overlayer); Claim 10: The biosensor according to claim 6, which comprises a metal surface or metal film coated with a the film whose swelling degree in pure water at 25°C is between 1 and 5 with respect to the film thickness in a dry state (See Page 83 silver layer with polystyrene overlayer); Claim 11: Wherein the metal surface or metal film comprises a free-electron metal selected from a group consisting of gold, silver, copper, platinum and aluminum (See Page 83 silver layer); Claim 41: Wherein the coating thickness of the film is between 10 angstroms and 3,000 angstroms (See polystyrene overlayer about 20 nm).

12. Claims 6, 8, 10, & 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Soper et al (2002).

13. Applicants' claims are toward a device.

14. Regarding Claims 6, 8, 10, & 11, Soper et al discloses the biosensor comprising A). A substrate (See Page 90, Section 2.3, Gold); B). Coated with a film selected from the group consisting of polystyrene, polyethylene, polypropylene, polyethylene

terephthalate, polyvinyl chloride, polymethyl methacrylate, polyester and nylon, and whose swelling degree in pure water at 25°C is between 1 and 5 with respect to the film thickness in a dry state,(this is an inherent property of the single component films) the film being on a surface of the substrate to be contacted with a physiologically active substance (See Page 90, Section 2.3, NH<sub>2</sub>-modified PMMA).

15. Additional Disclosures Included: Claim 8: Wherein the film whose swelling degree in pure water at 25°C is between 1 and 5 with respect to the film thickness in a dry state comprises a high polymer comprising 50% by weight or more of monomers having a solubility in water of 20% by weight or less (See Page 90, Section 2.3, NH<sub>2</sub>-modified PMMA); Claim 10: The biosensor according to claim 6, which comprises a metal surface or metal film coated with a the film whose swelling degree in pure water at 25°C is between 1 and 5 with respect to the film thickness in a dry state (See Page 90, Section 2.3, NH<sub>2</sub>-modified PMMA); and Claim 11: Wherein the metal surface or metal film comprises a free-electron metal selected from a group consisting of gold, silver, copper, platinum and aluminum (See Page 90, Section 2.3, Gold).

16. Claims 6, 8, 10, 11, & 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Wagner et al (US 6,329,209).

17. Applicants' claims are toward a device.

18. Regarding Claims 6, 8, 10, 11, & 14, Wagner et al discloses the biosensor comprising A). A substrate (See Column 13 lines 60-67 & Column 14 lines 34-37); B). Coated with a film selected from the group consisting of polystyrene, polyethylene,

polypropylene, polyethylene terephthalate, polyvinyl chloride, polymethyl methacrylate, polyester and nylon, and whose swelling degree in pure water at 25°C is between 1 and 5 with respect to the film thickness in a dry state, the film being on a surface of the substrate to be contacted with a physiologically active substance (See Column 14 lines 43-47 note: polymers and Column 14 lines 1-14).

19. Additional Disclosures Included: Claim 8: Wherein the film whose swelling degree in pure water at 25°C is between 1 and 5 with respect to the film thickness in a dry state (this is an inherent property of the single component films) comprises a high polymer comprising 50% by weight or more of monomers having a solubility in water of 20% by weight or less ((See Column 14 lines 43-47 note: polymers and Column 14 lines 1-14); Claim 10: The biosensor according to claim 6, which comprises a metal surface or metal film coated with a the film whose swelling degree in pure water at 25°C is between 1 and 5 with respect to the film thickness in a dry state (See Column 14 lines 43-47 note: polymers and Column 14 lines 1-14); Claim 11: Wherein the metal surface or metal film comprises a free-electron metal selected from a group consisting of gold, silver, copper, platinum and aluminum (See Column 13 lines 60-67 & Column 14 lines 34-37); Claim 41: Wherein the coating thickness of the film is between 10 angstroms and 3,000 angstroms (See Column 7 lines 57-61).

***Telephonic Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBBY RAMDHANIE whose telephone number is (571)270-3240. The examiner can normally be reached on Mon-Fri 8-5 (Alt Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. R./

/Walter D. Griffin/  
Supervisory Patent Examiner, Art Unit 1797